

Date: Mon, 15 Mar 93 17:59:25 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #323
To: Info-Hams

Info-Hams Digest Mon, 15 Mar 93 Volume 93 : Issue 323

Today's Topics:

 75 Ohm Hardline, How to Use? (2 msgs)
 AOR AR1000 -- A Question
 Customer Service--HRO and others
 Join a Internet->Packet Gate at Cal Tech
Monthly Review of Solar & Geophysical Activity for Feb 1993
 More Newbie Stuff
 New AEA unit - replace PK-232?
Using cell-phones to monitor cellular (was: Uniden reply...)
 VHF Car Antenna: 1/2 or 1/4 wave??
 W9GR DSP Kit

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Mon, 15 Mar 1993 20:31:57 GMT
From: mvb.saic.com!unogate!news.service.uci.edu!usc!sdd.hp.com!col.hp.com!
news.dtc.hp.com!hpsc.it.sc.hp.com!hplextra!hpl-opus!hpnmdla!alanb@network.UCSD.EDU
Subject: 75 Ohm Hardline, How to Use?
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, gary@ke4zv.uucp (Gary Coffman) writes:

>This is probably the best solution. The ZD Engineering transformers are
>quarterwave sections of air line. They are designed to fit directly on
>the CATV cable through a compression fitting (supplied), and they have
>a type N fitting on the other end. Being quarterwave lines, they are
>frequency selective, but do fine across the important parts of 2 meters

>and 70 cm. Considering the cost of hardline connectors, ZD is a bargain.

Seems like the 2 meter version should also work on 432 MHz. (3/4 wave is an odd multiple of 1/4 wave.) Then you could use the same coax for both bands, with an antenna switch up on the tower.

AL N1AL

Date: Mon, 15 Mar 1993 20:25:48 GMT
From: mvb.saic.com!unogate!news.service.uci.edu!usc!sdd.hp.com!col.hp.com!
news.dtc.hp.com!hpscit.sc.hp.com!hplextra!hpl-opus!hpnmdla!alanb@network.UCSD.EDU
Subject: 75 Ohm Hardline, How to Use?
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, <PTS102@psuvm.psu.edu> writes:

>My question is:

> How do we adapt the 75 ohm [hardline] coax to our 50 ohm
> antennas and rig?

>This is what we have come up with so far:

> a) We will have to buy 75 ohm connectors (probably N) for the hardline ...

Yeah, and they are expensive. The 75 ohm connectors have a smaller diameter center pin than 50 ohm. You can't plug a male 50 ohm into a female 75 ohm without distorting the female center pin. I have seen a number of homebrew adapters for 75 ohm hardline. What I once did was to use a double-female (barrel) UHF connector. Its outer diameter was the same as the OD of the hardline I was using, and the center pin was a nice press fit to the hardline center conductor. I used a pair of hose clamps to clamp a small length of aluminum pipe over the connector and hardline and then weather-proofed the whole thing with epoxy.

>Our options include:

> - Use the coax as-is. ...
> - Tune the antenna matching arms to 75 ohms. ...
> - Use transformers. ZD Engineering (73, November 1992, P. 27) sells
> units for various hardlines at \$34.95/pair. What puzzles me is that
> they are sold by frequency; does this mean that they are frequency
> sensitive, with a center frequency and poor performance on band edges?

They are probably 1/4-wave matching sections, which would be frequency-sensitive.

What I did is a combination of your second and third alternatives.
To tune the antenna for 75 ohms, I temporarily connected a 150-ohm

non-inductive resistor in parallel with the feedpoint and tuned for lowest SWR on a 50-ohm SWR meter.

At the radio end of the coax, I built a matching network in a minibox. I used a simple "L" network with L and C selected to match 50 to 75 ohms. It's plenty broadband enough for a ham band.

AL N1AL

Date: 16 Mar 93 00:39:43 GMT
From: portal!schuster@uunet.uu.net
Subject: AOR AR1000 -- A Question
To: info-hams@ucsd.edu

In article <1993Mar15.030545.10118@Armstrong.EDU> mark@Armstrong.EDU (Mark Eversoll) writes:

>I was given an AOR AR1000 scanner. The instruction manual leaves LOTS to be
>desired. The radio was used when I got it, so it has a bunch of [useless to me]
>frequencies stored in memory.

>

>My question: does anyone know how to clear ALL the memories? No jumper I could
>find inside the rig, and no "clear" button. The "manual" does not address this
>issue, much less many others.

You can't. (Short answer).

Long answer: If you reset the CPU, it will clear all thje memories. However, on most older models this will also clear the firmware and you must reprogram some basic stuff from scratch. However, resetting the CPU also requires total disassembly, soldering, and voiding of one's warranty. There are two non-labelled pads on the CPU board which, when shorted, will lobotomize the radio upon power-up.

Short answer: you can't.

Shameless plug (no financial interest involved).

=THE= manual to get is Howard Bornstein's "Guide To The AR1000" available from many dealers or direct:

Design Equilibrium

PO Box 1245
Menlo Park, CA 94025

--
Mike Schuster | schuster@shell.portal.com | 70346.1745@CompuServe.COM
----- | schuster@panix.com | GENie: MSCHUSTER

Date: Mon, 15 Mar 1993 23:56:46 GMT
From: dog.ee.lbl.gov!hellgate.utah.edu!cs.utexas.edu!zaphod.mps.ohio-state.edu!
magnus.acs.ohio-state.edu!csn!qwerty-gw.fsl.noaa.gov!quent@network.UCSD.EDU
Subject: Customer Service--HRO and others
To: info-hams@ucsd.edu

>WE, AS AMERICANS, CAN VOTE WITH OUR DOLLARS.

>and, when we practice this capitalist democracy, it seems that even large
>companies (i.e., Sears) can get the message. Salespeople should have
>enough product information to be able to EDUCATE the consumer about a
>product (what a concept) and not look down on someone who is not informed
>about a new tech item.

Yes!! I agree.

>How come when I go to an appliance dealer, usually, the salesman is eager
>to show me the latest whistles and bells on a washer, VCR, dryer, etc.
>Why? Because they work on COMMISSION and/or they are well TRAINED.

>What a concept for the ham world

I think commissioned sales people would be a bad thing -- it's hard
to make them go away and let you make your own decisions.

Informed sales staff would be a very good thing.

A good reference model is REI. They're a mail order supplier of
camping climbing and backpacking goods. They have a few stores around
the country and the staff are very friendly, well informed and
helpful -- they are not on commission.

--
Quent Johnson (quent@md.fsl.noaa.gov)
NOAA Forecast Systems Laboratory, Modernization Division
/\~/\^\^\^\~/~ Boulder, Colorado USA

Date: 16 Mar 1993 00:43:26 GMT

From: dog.ee.lbl.gov!newshub.nosc.mil!vela.acs.oakland.edu!cs.uiuc.edu!wupost!usc!
elroy.jpl.nasa.gov!nntp-server.caltech.edu!hss!pjb@network.UCSD.EDU

Subject: Join a Internet->Packet Gate at Cal Tech

To: info-hams@ucsd.edu

We have a copy of wg7j 1.08 NOS running on packet and the internet at Cal Tech. This system has a 9600 baud packet radio on 70cm from which you can connect to a local bbs, a local node which can get you out to other locations in southern california, and even las vegas and phoenix (or further) via other mountaintop systems. There is also conference or roundtable type system in the area where a half dozen to a dozen congregate every evening. A 2m, 9600 baud port is in the works and should be completed shortly.

I am prepared to accept memberships in a "Caltech Packet Gateway Group" (or whatever we decide to call our subgroup of the campus radio club) from random FCC LICENSED individuals on the internet.

The Caltech Radio Club Packet Gateway Group, shall

- * maintain and expand a packet/internet link at Cal Tech in accordance with FCC rules and the interests of the developers.
- * facilitate the expansion of packet facilities in California
- * act as a collection of people knowledgeable in high speed packet, networking, and other technical types throughout the southern california area. (hopefully this will also provide for some continuity in my absence)

Currently we have a 386/25, some radios, some hardline, and a makeshift antenna. We need a decent 2m/440 antenna. Also, the equipment must be remoted on a higher building where we will have line of sight to much of la and orange counties.

In the long term, we would like to R&D some high speed packet stuff and/or get space from coordination bodies to get 56KB or higher speed packet going in california.

I honestly do not expect to be around much more than a year and a half, however.

Some information may be found by anonymous ftp to w6ue.caltech.edu.

At this time, I am interested in getting a list of individuals who are interested and would not mind joining a support group (\$\$) so that we can improve the system. I and several others have contributed over \$1000 of equipment in order to get started, and quite frankly feel the need to go to a user-supported system.

Operators callsigns will be automatically transmitted when you are using the system (just like your radio + tnc was on our tower). Proof of license of technician (no-code ok) or better license will be required before we will give out passwords to access the system. At first I would like to limit membership to a dozen or two interested persons. The system can handle multiple logins, but I must emphasize that we just got the system functional a month ago and need to fund some improvements before feeling comfortable opening it up more.

Current FCC rules make accessing INTERNET from PACKET fairly unworkable. Also, on a 9600 baud radio channel you at most get 1200 baud or so of service (remember you share the channel with others). Thus, capacity is not up to the traffic volume found on internet. Also, this seems to me to be mainly a way of avoiding telephone use and/or paying access fees. I don't want to tie up busy radio channels because some one is to cheap to pay whatever netaccess costs these days.

reply to: pjb@hss.caltech.edu

I will see how many responses we get in a week or so, and decide then how we shall proceed.

73 de Paul KI6CQ
pjb@hss.caltech.edu

Date: 16 Mar 93 00:44:12 GMT
From: news-mail-gateway@ucsd.edu
Subject: Monthly Review of Solar & Geophysical Activity for Feb 1993
To: info-hams@ucsd.edu

-- MONTHLY REVIEW OF SOLAR AND GEOPHYSICAL ACTIVITY --
Summary for February 1993

Report compiled by the
Solar Terrestrial Dispatch
P.O. Box 357
Stirling, Alberta
T0K 2E0, Canada

Data Provided In-Part Courtesy of the
Space Environment Services Center, NOAA
and the
NRC / Dominion Radio Astrophysical Observatory
Penticton, British Columbia, Canada

MONTHLY ACTIVITY SUMMARY FOR FEBRUARY 1993

We are now in month 78 of solar cycle 22 (as of February 1993). There were 428 flares (optical and x-ray) in February. This is over 2.5 times as many flares as were observed in January. This exceeds the total number of flares observed since August 1992 when 487 flares were recorded. Of the 428 flares, two were ranked as major events and 16 were categorized as minor M-class events.

A breakdown of the energetic events for the last four months follows below, together with a summary of the percentage increase or decrease in the number of energetic events amongst the four months. Negative percentages represent decreases. For example, there were 159.4 % more energetic events in February than in January, while January had 41.9 % fewer energetic events than December 1992.

	FEB '93	JAN '93	DEC '92	NOV '92
Major	2	0	0	1
Minor M-class	16	2	4	7
Class C or smaller	410	163	280	326
Total	428	165	284	334
Percentage	FEB	+159.4 %	+ 50.7 %	+ 28.1 %
Change		JAN	- 41.9 %	- 50.6 %
			DEC	- 15.0 %

The monthly sunspot number for February was 126.1 as computed by the SESC. The preliminary RI international sunspot number for February was 90.5. These values compare with the sunspot numbers recorded for November (SESC value of 124.3, RI value of 92.0) and December (SESC value of 127.4, RI value of 83.3) of 1992.

The monthly 10.7 cm solar radio flux for February was 142.6. This value also compares nicely with the mean flux values reported for November (145.2) and December (139.0) of 1992.

The largest flares of February were observed on 06 February and 17 February. The first attained a class M9.6/2B rating and was the result of a combination 3B flare in Region 7417 (then located at N15E20) and a 2B flare in Region 7419 (then located at N11E25). The flare was accompanied by a 660 sfu tenflare, but lacked both Types II and IV sweeps. By 21:00 UT, the

post-xray signature of this event exhibited a fairly attractive series of sinusoidal oscillations approximately 15 minutes in duration each.

The major flare of 17 February was a class M5.8/SF event that peaked at 10:40 UT. This region was near the west limb (at S07W87) during this event which allowed detailed observations of loop and surge dynamics. There were no sweeps reported and the event lacked significant radio bursts.

The list of minor M-class or greater flares and associated radio emissions observed during February follows:

SUMMARY OF MAJOR ENERGETIC EVENTS

Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
06 Feb:	1814	1824	1950	M9.6	2B	7417	N12E26	610	700	360
17 Feb:	1032	1040	1227	M5.8	SF	7420	S07W87	110	130	83

SUMMARY OF MINOR M-CLASS EVENTS

Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
01 Feb:	0155	0204	0235	M2.2				26	76	41
	0652	0702	0710	M1.4	SF	7416	S09E90			
05 Feb:	0448	0540	0631	M1.0						
06 Feb:	1643	1649	1654	M1.0	SN	7420	S13E54			
09 Feb:	0714	0722	0727	M1.0	SN	7420	S08E20			
10 Feb:	0734	0741	0746	M1.0	2B	7420	S04E03	130	32	
	0835	0839	0841	M1.5	1N	7420	S04E05	49	95	76
	2001	2007	2012	M2.4	2B	7420	S04W03	68	150	100
11 Feb:	1802	1811	1825	M1.2	1B	7420	S04W15	48		
	1829	1833	1840	M2.7				230	280	220
14 Feb:	1241	1258	1311	M2.0	2B	7427	S22E78	91	160	150
16 Feb:	1419	1429	1442	M2.1	SF	7420	S06W76		37	32
18 Feb:	0258	0308	0337	M4.0	2B	7425	N14W02	280	170	120
	0927	1003	1037	M1.6	1N	7427	S20E28	250	90	54
	1054	1106	1141	M1.1	1B	7427	S21E21	330	160	120
21 Feb:	0024	0043	0102	M1.4	SF	7433	N13E75	23	18	15

The geomagnetic field in February was slightly more active than in January. The estimated planetary A-index for February was 15, compared with 13 in January. The average monthly estimated planetary A-index values have been within 2 points of 15 for the last five months (since October 1992, inclusive). There were two sudden magnetic impulses observed during the month. The first was observed at 03:02 UT on 17 February. The second was

observed at 22:20 UT on 27 February. This latter disturbance was thought to have been due to either a well placed coronal hole or disappearing filament effects (or a combination thereof) and was not followed by very significant geomagnetic activity.

The most disturbed day of the month was 17 February. An initially quiet field became disturbed following the sudden magnetic impulse at 03:02 UT. Minor to major storming ensued at middle latitudes and major to severe storming was attained at high latitudes between 09:00 UT and 18:00 UT. The source of this activity was not clear, but could have been related to a filament which erupted off the disk on between 18:20 UT on 13 February and 17:57 UT on 14 February. The filament measured approximately 14 degrees in extent.

There were no satellite proton events during the month. However, by the end of the month, proton fluence at greater than 10 MeV was showing a definite upward trend, possibly related to a proton-producing region (Region 7440) that was within several days of the east limb.

RECENT SOLAR INDICES (PRELIMINARY) OF THE OBSERVED MONTHLY MEAN VALUES
Last Updated March 15, 1993

	Sunspot Numbers					Radio Flux		Geomagnetic	
	Observed		Ratio	Smooth	Values	Penticton	Smooth	Smooth	
	SESC	RI	RI/SESC	SESC	RI	10.7 cm	Value	Ap	Value
	YEAR = 1989								
Jan:	203.2	161.6	.80	189.2	141.9	235.4	190.2	19	16.7
Feb:	211.0	164.5	.78	196.0	144.7	222.4	194.0	15	17.0
Mar:	176.8	131.0	.74	204.1	149.4	205.1	199.7	41	17.6
Apr:	172.3	129.3	.75	209.9	153.1	189.6	204.4	23	18.2
May:	207.0	138.4	.67	216.4	156.5	190.1	209.3	16	18.8
Jun:	297.3	196.0	.66	220.1	157.9	239.6	213.1	17	19.2
Jul:	193.9	126.8	.65	221.1	158.1	181.9	212.6	8	19.1
Aug:	243.0	166.8	.69	221.5	157.4	217.1	209.7	20	19.3
Sep:	240.7	176.8	.74	221.3	156.3	225.9	207.2	17	18.8
Oct:	217.4	158.5	.73	223.2	157.1	208.7	206.3	21	18.3
Nov:	255.0	173.0	.68	223.4	157.3	235.1	206.1	19	18.4
Dec:	217.8	166.1	.76	217.3	153.3	213.0	203.3	16	18.4
	YEAR = 1990								
Jan:	239.3	177.3	.74	212.4	150.6	210.1	200.4	14	18.6
Feb:	184.7	130.5	.71	213.9	152.9	178.3	200.5	23	18.8

Mar:	198.6	140.3	.71	212.7	152.0	188.8	198.7	23	18.6
Apr:	196.1	140.3	.72	210.5	149.3	185.3	195.6	27	18.3
May:	187.7	132.2	.70	208.1	147.0	189.7	192.4	16	17.6
Jun:	168.9	105.4	.62	205.3	143.8	170.9	189.9	16	16.8
Jul:	204.3	149.4	.73	203.8	140.6	180.7	190.4	14	16.2
Aug:	269.4	200.3	.74	206.3	140.5	222.6	193.9	19	15.4
Sep:	186.4	125.2	.67	211.1	142.1	177.4	198.3	14	15.0
Oct:	219.0	145.5	.66	213.1	142.1	182.0	200.6	15	14.8
Nov:	196.1	131.4	.67	213.7	141.7	184.3	201.2	9	14.4
Dec:	208.0	129.7	.62	216.1	143.9	204.9	202.7	7	15.7

YEAR = 1991

Jan:	213.5	136.9	.64	220.5	147.6	229.4	205.5	8	17.4
Feb:	270.2	167.5	.62	221.5	147.6	243.0	206.3	10	18.4
Mar:	227.9	141.9	.62	220.7	146.6	230.0	205.9	27	19.1
Apr:	215.9	140.0	.65	220.7	146.5	198.8	206.8	17	20.0
May:	182.5	121.3	.66	219.6	145.5	190.3	207.1	18	21.7
Jun:	231.8	169.7	.73	218.9	145.2	206.8	207.4	44	23.0
Jul:	245.7	173.7	.71	219.5	146.3	212.0	207.7	27	23.6
Aug:	251.5	176.3	.70	218.3	146.5	210.3	206.8	30	24.7
Sep:	185.8	125.3	.67	214.2	144.7	180.6	203.9	20	25.0
Oct:	220.1	144.1	.65	208.4	141.6	201.3	199.7	31	24.3
Nov:	169.0	108.2	.64	202.2	137.9	172.0	195.4	33	24.1
Dec:	217.7	144.4	.66	193.7	131.6	223.9	188.9	15	23.0

YEAR = 1992

Jan:	217.9	149.3	.69	183.3	123.6	217.6	181.8	14	21.1
Feb:	238.2	159.6	.67	171.8	115.2	232.1	174.8	31	19.8
Mar:	160.5	106.9	.67	161.6	108.0	171.3	168.5	14	19.4
Apr:	144.0	99.8	.69	154.3	103.1	158.5	162.9	11	18.9
May:	106.3	73.8	.69	148.9	100.1	125.4	158.8	21	17.5
Jun:	104.7	65.2	.62	143.3	96.9	116.7	154.2	15	16.6
Jul:	121.4	85.7	.71	134.3	90.6*	132.3	146.6	10	16.5*
Aug:	99.5	64.5	.65	124.4	84.0*	122.1	138.8*	15	15.8*
Sep:	93.8	63.9	.68			116.8		25	
Oct:	136.2	88.3	.65			130.8		15	
Nov:	124.3	92.0	.74			145.2		14	
Dec:	127.4	83.3	.65			139.0		13	

YEAR = 1993

Jan:	92.1	59.1*	.64*	121.0	13*
Feb:	126.1	90.5*	.72*	142.6	15*

* = Preliminary estimates, Unmarked = Final Values.

The lowest smoothed sunspot number for Cycle 21, RI = 12.3, occurred in September 1986. The sunspot maximum for this cycle (cycle 22) occurred in July 1989, with a peak smoothed sunspot number (RI) of 158.1.

Note: Prior to June 1991, the 10.7 cm solar radio flux measurements originated from the Algonquin Radio Observatory near Ottawa. From June 1991 onward, the flux has been (and will continue to be) measured from the Dominion Radio Astrophysical Observatory at Penticton, British Columbia, Canada.

DAILY VALUES OF SOLAR FLUX AT 2800 MHz (PENTICTON-DRAO) AT 2000 UT

Data Valid for February 1993

Data Courtesy of the National Research Council of Canada
Herzberg Institute of Astrophysics
Dominion Radio Astrophysical Observatory
Penticton, British Columbia
CANADA

Series D is the best estimate of absolute value and is obtained by using the multiplier 0.90 recommended by Commission V of URSI.

1993	Observed	Adj to 1 AU	
	Series C	Series C	Series D
1	125.1	121.5	109.3
2	128.3	124.7	112.2
3	136.9	133.0	119.7
4	147.4	143.2	128.9
5	160.1	155.6	140.0
6	183.8	178.8	160.9
7	175.9	171.2	154.1
8	188.4	183.4	165.1
9	185.1	180.3	162.3
10	179.6	175.0	157.5
11	173.2	168.8	151.9

12	148.6	144.9	130.4
13	135.0	131.7	118.5
14	141.4	137.9	124.1
15	134.8	131.6	118.4
16	133.7	130.5	117.4
17	124.3	121.4	109.3
18	126.0	123.2	110.9
19	116.0	113.4	102.1
20	123.3	120.6	108.5
21	122.9	120.3	108.3
22	133.1	130.3	117.3
23	132.3	129.6	116.6
24	135.4	132.7	119.4
25	128.0	125.5	112.9
26	126.2	123.8	111.4
27	124.0	121.6	109.4
28	123.6	121.4	109.3
Mean:	142.6	139.1	125.2

OUTSTANDING EVENTS - SOLAR RADIATION AT 2800 MHZ **

DATE	KEY	CLASS	START U.T.	MAXIMUM U.T.	DURATION	PEAK FLUX	MEAN FLUX
February			HOURS	HOURS	MINUTES		
06	3 S	Simple II	1650.3	1653.3	12.6	19.0	3
	Z 45 GB	Great Burst	incompl	1819	<17	627	--- A
	@ 29 PBI	P.B.Increase	incompl	1832.5	130	47	--- A
07	4 S/F	Simple II F	1846.3	1850.7	18.2	36.1	9
08	Z 4 S/F	Simple II F	1706.6	1709.1	5.8	51.7	21
	@ 29 PBI	P.B.Increase	1712.5	1712.5	15	12.5	5
09	Z 4 S/F	Simple II F	1659.4	1702.7	4.5	30.0	6
	@ 29 PBI	P.B.Increase	1704	1705	60	6.3	3
10	3 S	Simple II	2002.0	2004.5	>4.5	34.6	--- A
11	3 S	Simple I	1830.0	1831.8	5.7	271.3	46
12	3 S	Simple II	2257.4	2259.2	7.9	18.5	5
	3 S	Simple II	0000.6	0001.8	3.0	22.2	7

14	Z	3	S	Simple II	2301.9	2305.0	8.0	18.2	6
	@	29	PBI	P.B.Increase	2310	2310.5	34	4.2	2
18		4	S/F	Simple II F	2238.2	2247.3	14.3	13.7	6
24	Z	4	S/F	Simple II F	1646.0	1647.5	6.8	27.4	7
	@	29	PBI	P.B.Increase	1653	1658	42	5.3	4
		24	R	Rise only	1944	2130	>300	16.7	13

A. Maximum observed value for incomplete record.

SUMMARY OF AVERAGE SOLAR AND GEOPHYSICAL INDICES FOR FEBRUARY 1993

(Based on SGDB data released by the S.T.D.)

10.7 cm Solar Radio Flux: 142.59
Sunspot Number: 130.21
Boulder A-Index: 11.82
Planetary A-Index: 13.64
Background X-Ray Flux (1-8A): B5.64

Proton Fluence at > 1 MeV: 1.6311e+06
Total (non-averaged) Fluence at > 1 MeV: 4.4040e+07
Proton Fluence at > 10 MeV: 1.1544e+04
Total (non-averaged) Fluence at > 10 MeV: 3.1170e+05

Average Daily Deviation of the Boulder Magnetometer: 20.18 nT

Short Wave Fadouts (SWFs): 0.64
Total Number of SWFs during Interval: 18
SWF Durations: 10.07 minutes
Total Duration of SWFs during Interval: 282 minutes

Average Daily X-Ray Flux: C1.11
Average Neutron Counts: -0.04%
Average Daily PCA: -0.01 dB

** End of Monthly Report **

Date: 16 Mar 93 01:43:45 GMT
From: olivea!inews.Intel.COM!cad636!dbraun@decwrl.dec.com
Subject: More Newbie Stuff
To: info-hams@ucsd.edu

Hello again,

Thanks to this groups helpful people and FAQs, I fiound a copy of Super Morse, and last Saturday passed the 13 WPM test when I expected to only pass the 5 WPM! I also passed the general theory, so sooner or later my license will show up in the mail!

I was also at the Foothill swap earlier that day, and was inspired by all the stuff for sale.

So my questions are:

1: What's the best reference for exactly which parts of what bands each class of licensee my operate on, with what power and what emission types? I have seen this info scattered piecemeal through the study guides, etc., but never concisely presented in one place. If there are one or two books that have all the facts you really need to effectively operate, could you recommend them? (I guess would be the ARRL Operating Guide and their FCC Regs book)

2: Is there a good guide to old HF rigs? (Either online or in a book?) I'm interested on tube stuff.I saw a lot of Heathkot (HW-101, SB-XXX,) Drake, Yaesu, etc. stuff for sale, but it's not clear what the gems or dogs are. (Yes, it's obvious that a Drake TR-4(?) is better that a HW-101, but then it costs three times more.)

Thanks,

--

Doug Braun

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                / decwrl \
                | hplabs |
or maybe:      -| oliveb |- !intelca!mipos3!cadev6!dbraun
                | amd    |
                \ qantel /
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"There is no human problem which could not be solved if people would simply do as I advise." -- Gore Vidal

Date: 15 Mar 93 18:43:21 EST
From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa
Subject: New AEA unit - replace PK-232?
To: info-hams@ucsd.edu

In article <9303152055.AA23024@ucsd.edu>,
CELLIS%BROCKVMA.BITNET@cunyv.cuny.edu wrote:

> I heard from a friend this weekend that there is a new AEA unit out -
> not the DSP boxes, but a replacement for the PK-232. I have let my QST
> lapse, so I haven't seen any ads. Anybody care to fill me in? Thanks.

Carlton-

I heard the same report. So, this weekend at the Orlando Hamfest, I asked
the AEA rep. about it.

AEA claims that the new unit, the PK-300, PK-400 or PK-600 (I forget), is a
new model in the line, but doesn't replace the PK-232. (Amateur Electronic
Supply has had it for several weeks.)

At the same time, there is an upgrade available if you have the MBX version
of the PK-232, that includes Pactor.

73, Fred, K4DII

fred-mckenzie@ksc.nasa.gov

Date: Mon, 15 Mar 1993 23:53:05 GMT
From: csus.edu!news.ucdavis.edu!othello.ucdavis.edu!ez006683@decwrl.dec.com
Subject: Using cell-phones to monitor cellular (was: Uniden reply...)
To: info-hams@ucsd.edu

system@garlic.sbs.com (Anthony S. Pelliccio) writes:

:
: Why do I get the feeling that the little \$59 cellular that RS sells
: would be one of the easier ones to modify for something like that. And
: best part is, my roomie has one in his car that he's getting ready to
: ditch. Hmmm..... experimentation time! Oh, wait a minute, did I say
: that?
:
: Tony

The old Radio Shack phones were easily programmable to force transmission
and reception on any of the channels the phone is capable of using. I can't
remember the correct way to do this but you need to first get ahold of a
service handset for the programming. Some of the radio Shack managers will

have the info to help you. I think the service manual tells how to do the programming. The only trick is the service handset. I can't remember how to convert a regular handset for this use but it was really trivial I think it was grounding pins 5 and 6 together. Don't do this on my word I am not at all sure which pins need to be shorted together, but I do know that is all that needs to be done. Good luck and happy hacking!

Dan

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*-----*
* Daniel D. Todd      Packet: KC6UUD@WA6RDH.#nocal.ca.usa      *
*                    Internet: DDTODD@ucdavis.edu              *
*                    Snail Mail: 1750 Hanover #102              *
*                    Davis CA 95616                             *
*-----*
*      I do not speak for the University of California....      *
*      and it sure as hell doesn't speak for me!!              *
*-----*
*      If you don't believe in no-code you don't believe in me.  *
*-----*
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Date: Mon, 15 Mar 1993 23:38:59 GMT
From: csus.edu!news.ucdavis.edu!othello.ucdavis.edu!ez006683@decwrl.dec.com
Subject: VHF Car Antenna: 1/2 or 1/4 wave??
To: info-hams@ucsd.edu

gary@ke4zv.uucp (Gary Coffman) writes:
: In article <11MAR93.22864201.0038@UNBVM1.CSD.UNB.CA> Paul Cormier <Y6HJ@UNB.CA>
writes:
: >
: >For those who need to know:
: >- my radio is an Alinco DJ-580. (~2 watts)
:
: We don't need to know about the radio, but tell us about this three
: foot high car. What in the world is it, a Lotus Europa?
:
Does it have the bigger coxsworth engine?
:
: Gary
Dan

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*                    Internet: DDTODD@ucdavis.edu              *
*                    Snail Mail: 1750 Hanover #102              *
*                    Davis CA 95616                             *
*-----*
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* I do not speak for the University of California.... *
* and it sure as hell doesn't speak for me!! *

Date: Tue, 16 Mar 1993 01:45:06 GMT
From: concert!gatech!howland.reston.ans.net!usenet.ins.cwru.edu!news.ysu.edu!
yfn.ysu.edu!ag821@decwrl.dec.com
Subject: W9GR DSP Kit
To: info-hams@ucsd.edu

Just got my DSP kit in the mail Wed. Was going to put off building it, but the big snow storm didn't allow me to get away on my planned vacation.

I was real impressed with the quality of the board.. and the parts. Everything on the parts list was there. The parts list was very descriptive, listed all possible alternatives that might be in the kit (like dif. labelings of caps and other parts). NOW to some of you El. whizzes this is no big deal. I am fairly new at this stuff and getting better with each project, but still don't know the 5 or so diff possible labelings for each cap and IC.

The instructions say that the kit is not for beginners. I have been a ham for about 2 years and have now background in electronics, except what I had to memorize for my license. I have built a HW9, a Ramsey 2 meter kit, an Oak Hill QRP meter, a couple of keyers and an Argonaut filter from schematic, and in my opinion this was the most enjoyable kit (along with the Oak Hill) and best quality I have very had the pleasure to build.

The directions were absolutely clear. There was no ambiguity at all. The solder pads went thru the board, and the board was coated ot prevent most bridges. Using the right soldering iron, the soldering was great. I have never been so proud of a piece of equipment I have built. I will proudly show both the component side and bottom side. It looks better than any commercial jobs I have seen. TThis is because of the board and the nice way it solders. (i recently used a Radio Shack component board for a filter..and found that it really didn't like being soldered allthat much).

I performed the "smoke test" and it tested fine. I put in the chips and then took a break to go to town to get some lettering to make the enclosure look better. I used RCA jacks to that I could use the filter on more than one rig. When I hooked up the filter

and turned it one and did the simple vol adjust from my rig, it worked fine the first time.

I have played with some of the functions and they all seem to work great. the bands aren't that bad tonight, so will have to wait and try it out some more on 40.

I sure wish that DAvid, W9GR would kit some more things...My only complaint is that I am now having post kit building depression. I was really ttaking my time, and it just went together too easily and without any hassles

thanks David.

73s de Cookeville,TN

Jeff, AC4HF

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Jeff M. Gold, AC4HF

Manager, Academic Computing Support

Tennessee Technological University

End of Info-Hams Digest V93 #323
